

NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
COMMON MULTIPLE CONNECTOR, ITEM 330 ----- SV778872-26 (1)	2/2	330FM09  Shorted vehicle power line.  Contamination, cable chafing.	END ITEM: High vehicle power consumption.  GFE INTERFACE: The vehicle power supply is current limited to 10 amps. Discharge EMU power supply.  MISSION: Loss of use of one EMU.  CREW/VEHICLE: None.  TIME TO EFFECT /ACTIONS: Seconds.  TIME AVAILABLE: N/A  TIME REQUIRED: N/A  REDUNDANCY SCREENS: A-N/A B-N/A C-N/A	A. Design - Electrical connections are conformal coated to minimize the probability of contamination bridging conductors and causing an electrical short. The electrical leads are protected from mechanical damage by a cover and are bundled together and laced. Short line lengths and bundling of the electrical lines prevent mutual chafing.  B. Test - Certification Test - Certified for a useful life of 15 years.  C. Inspection - The DCM External Wiring Assembly (SV774161-1) conformal coating, is visually inspected for uniformity and completeness of coverage per step 10 of Operation 150. The DCM External Wiring Assembly is visually inspected at final inspection per Operation 170.  D. Failure History - None.  E. Ground Turnaround - Tested for non-EET processing per FEMU-R-001, V1103.02 Orbiter Checkout. FEMU-R- 001 Para 8.2 EMU Preflight KSC Checkout for EET processing.  F. Operational Use - Crew Response - Pre/PostEVA: Trouble shoot problem, if no success, continue EVA operations. Deactivate airlock power supply, operate EMU on battery power, perform battery swap as required. Training - Standard EMU training covers this failure mode. Operational Considerations - EVA checklist procedures verify hardware integrity and systems operational status prior to EVA. Flight rules define go/no go criteria related to SCU power.

EXTRAVEHICULAR MOBILITY UNIT  
SYSTEMS SAFETY REVIEW PANEL REVIEW  
FOR THE  
I-330 COMMON MULTIPLE CONNECTOR  
CRITICAL ITEM LIST (CIL)

EMU CONTRACT NO. NAS 9-97150

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